

Application Number: 10/718,348

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Applicant : John C. Simmons

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Group Art Unit: 3766

Examiner : Deborah Leslie Malamud

Commissioner for Patents

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**Response to office action mailed 4/30/2008**

Responsive to a telephone conversation on July 10, 2008 with the examiner, applicant has made claim modifications and prepared a Request for Continued Examination (RCE). Applicant acknowledges that applicant's use of the unmodified term "directions" was unfortunate because it could easily be misinterpreted so as to be limited to "directions" such as "put your retainer back on" (Knierim) or "this gumball is for not barking for the last 10 minutes" (Watson). Though the current invention as described in the specification can communicate affirmations, corrections and pattern-identified commands, it also conveys spatial directions. Thus, the current invention has the ability to communicate "spatially precise directions" [0011] and "spatially intuitive" directional control ([0009] in the specification; e.g., arrows and/or points of reference). In one embodiment, where the stimulators create a pattern on the tongue, the "ideal spatial position cognizance" [0021] of that location (sharing the same spatial framework with both the vision system and the brain's perceived spatial framework) provides the brain with a directional reference that is eminently aligned with the brain's own spatial framework (allowing "spatial directions" that are perfectly related to the wearer's current spatial perspective).

Spatial directions can be communicated in numerous applicable ways including:

- a. Patterns (such as arrows, stop/go symbols, etc.):
  - 1. pointing in the preferred direction [0028][0059]
  - 2. communicating action e.g., (move now), tilt head [0030][0069][0071][0072]
  - 3. communicating speed ([0029][0060] both by moving arrows and speed of sequential point stimulation along an arrow
  - 4. importance [0061]
- b. Points [0056-0058]
- c. Lines indicating a path to be followed [0062]

Applicant has modified claim 1 to read as below (a marked-up version is also in the attached "Amendments to the claims"). Because the application has been pending since 2003 and applicant desires to eliminate as much as possible any potential for confusion

with other devices and the potential delays of such confusion, the changes in claim 1 include the addition of elements of claim 2 which is now withdrawn.

1. (currently amended) A device for the direction of a living body comprising:
  - a plurality of stimulators whose positions indicate a selected one of the group comprising:
    - A. a spatial direction, B. a pattern relatable to a behavior, and C. combinations of A and B; and
  - a behavior controller operatively connected to stimulators for directing stimulations; and
  - a data communication device for communications between the behavior controller and external sources of a selected one of the group comprising:
    - A. data, B. human-directed control, C. computer-directed control, and D. combinations of A, B, and C; and
  - a power source for the provision of power to components requiring power;whereby a potentially distant entity can direct the wearer of the device to perform potentially complex actions.

Levine:

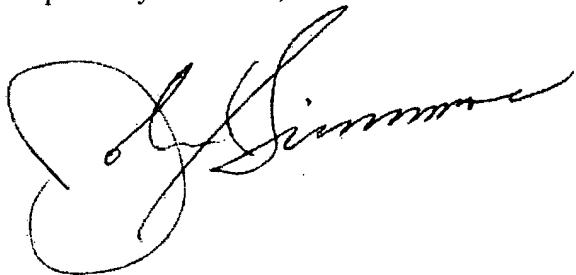
Although applicant probably waxed verbose regarding Levine in the previous response, a brief comparison of the “direction” of the current invention and Levine will help further distinguish the differences.

(The underscores below are just to identify, for each of the 4 comparisons noted below, the 4 key spatially related elements being highlighted in that paragraph.)

- A. Levine (applicable to an “invisible electric dog fence” with a potentially irregular perimeter) does not, with its single electrode (the electrode position has no locational significance), provide “spatial direction”. Levine’s “direction” can’t identify or relate to vectors in free space but only applies to a definition of “direction” that is limited to punishment or warnings for exceeding a perimeter or range.
- B. Levine does not provide or teach any means for knowing even the azimuthal orientation of the wearer. Thus, it doesn’t provide any spatial frame of reference to define a spatial point where the wearer exists in space with the accuracy required to give “spatial directions” for navigating around obstacles or limits (rather than punishing when encountering them).
- D. Levine also doesn’t teach any process for spatially directing the wearer anywhere. Instead, its “direction” is a penalty that enforces a perimeter, albeit a potentially irregular one.

The other comparisons between Levine and the current invention in the previous response, although included by reference, are probably ancillary. The important point seems to be that Levine's "direction" is not inclusive of the "spatial direction" of the current invention.

Respectfully submitted,



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Request for Continued Examination (RCE) is attached.  
Amendments to the claims section is attached.